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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>		Attorney Docket No. <b>466992001100</b>	
		First Inventor <b>Chong-Sheng YUAN</b>	
		Title <b>DETERMINATION OF IONS USING ION-SENSITIVE ENZYMES</b>	
		Express Mail Label No. <b>EL961005567US</b>	

2215 U.S. PTO  
10/665883  
09/19/03

<b>APPLICATION ELEMENTS</b> <small>See MPEP chapter 600 concerning utility patent application contents.</small>	<b>ADDRESS TO:</b> MS Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
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1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (2 pages) <small>(Submit an original, and a duplicate for fee processing)</small> 2. <input type="checkbox"/> Applicant claims small entity status. <small>See 37 CFR 1.27.</small> 3. <input checked="" type="checkbox"/> Specification <span style="float: right;">[Total Pages <b>46</b>]</span> <small>(preferred arrangement set forth below)</small> <ul style="list-style-type: none"> <li>- Descriptive title of the invention</li> <li>- Cross Reference to Related Applications</li> <li>- Statement Regarding Fed sponsored R &amp; D</li> <li>- Reference to sequence listing, a table, or a computer program listing appendix</li> <li>- Background of the Invention</li> <li>- Brief Summary of the Invention</li> <li>- Brief Description of the Drawings (if filed)</li> <li>- Detailed Description</li> <li>- Claim(s)</li> <li>- Abstract of the Disclosure</li> </ul> 4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) <span style="float: right;">[Total Sheets <b>2</b>]</span> 5. Oath or Declaration <span style="float: right;">[Total Sheets <span style="border: 1px solid black; padding: 0 10px;">  </span>]</span> <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> Newly executed (original or copy)</li> <li>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))  <small>(for continuation/divisional with Box 18 completed)</small></li> <li>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b>  <small>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</small></li> </ul> 6. <input checked="" type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 (2 pages)	7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program <i>(Appendix)</i> 8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i> <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> Computer Readable Form (CRF)</li> <li>b. Specification Sequence Listing on:             <ul style="list-style-type: none"> <li>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or</li> <li>ii. <input type="checkbox"/> Paper</li> </ul> </li> <li>c. <input type="checkbox"/> Statements verifying identity of above copies</li> </ul>
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ACCOMPANYING APPLICATIONS PARTS	
9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <span style="float: right;"><input type="checkbox"/> Power of Attorney</span> <small>(when there is an assignee)</small> 11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i> 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <span style="float: right;"><input type="checkbox"/> Copies of IDS Citations</span> 13. <input type="checkbox"/> Preliminary Amendment 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <small>(Should be specifically itemized)</small> 15. <input type="checkbox"/> Certified Copy of Priority Document(s) <small>(if foreign priority is claimed)</small> 16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). <small>Applicant must attach form PTO/SB/35 or its equivalent.</small> 17. <input type="checkbox"/> Other: <span style="border: 1px solid black; display: inline-block; width: 150px; height: 20px; vertical-align: middle;"></span>	

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation    ☐ Divisional    ☐ Continuation-in-part (CIP)    of prior application No.: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS	
<input checked="" type="checkbox"/> Customer Number: <span style="border: 1px solid black; padding: 0 20px;">25225</span>	OR <input type="checkbox"/> Correspondence address below
Name	
Address	
City	State
Country	Zip Code
Telephone	Fax

Name (Print/Type)	Laurie L. Hill	Registration No. (Attorney/Agent)	51,804
Signature		Date	September 19, 2003

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EL961005567US, in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 9-19-03      Signature: (Michael Boyd)

*Effective 01/01/2003. Patent fees are subject to annual revision.*

☐ Applicant claims small entity status. See 37 CFR 1.27

<b>TOTAL AMOUNT OF PAYMENT</b>	<b>(\$)</b> 2,022.00
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Application Number	Not Yet Assigned
Filing Date	Concurrently Herewith
First Named Inventor	Chong-Sheng YUAN
Examiner Name	Not Yet Assigned
Art Unit	Not Yet Assigned

Attorney Docket No.	466992001100
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**FEE CALCULATION (continued)**

☒ Deposit Account

03-1952

Morrison & Foerster LLP

<input checked="" type="checkbox"/>	Charge fee(s) indicated below	<input checked="" type="checkbox"/>	Credit any overpayments
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<input checked="" type="checkbox"/>	Charge any additional fee(s) during the pendency of this application
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☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

### 1. BASIC FILING FEE

Large Entity	Small Entity
<p>1. <b>Revenue Recognition</b></p> <p>Large entities use the <b>percentage of completion method</b> for long-term contracts, recognizing revenue as work progresses. Small entities often use the <b>cost of sales method</b>, recognizing revenue only when the contract is completed.</p>	<p>1. <b>Revenue Recognition</b></p> <p>Small entities often use the <b>cost of sales method</b> for long-term contracts, recognizing revenue only when the contract is completed.</p>
<p>2. <b>Inventory Valuation</b></p> <p>Large entities use the <b>FIFO (First In, First Out)</b> method for inventory valuation. Small entities may use the <b>LIFO (Last In, First Out)</b> method, which can provide a tax advantage in periods of rising prices.</p>	<p>2. <b>Inventory Valuation</b></p> <p>Small entities may use the <b>LIFO (Last In, First Out)</b> method for inventory valuation, which can provide a tax advantage in periods of rising prices.</p>
<p>3. <b>Depreciation</b></p> <p>Large entities use the <b>MACRS (Modified Accelerated Cost Recovery System)</b> for depreciation. Small entities may use the <b>straight-line method</b>, which spreads the cost of an asset evenly over its useful life.</p>	<p>3. <b>Depreciation</b></p> <p>Small entities may use the <b>straight-line method</b> for depreciation, which spreads the cost of an asset evenly over its useful life.</p>
<p>4. <b>Lease Accounting</b></p> <p>Large entities use the <b>ASC 842 (Leases)</b> standard, which requires the recognition of most leases on the balance sheet. Small entities may use the <b>ASC 840 (Leases)</b> standard, which allows for more flexibility in lease accounting.</p>	<p>4. <b>Lease Accounting</b></p> <p>Small entities may use the <b>ASC 840 (Leases)</b> standard, which allows for more flexibility in lease accounting.</p>
<p>5. <b>Goodwill Impairment</b></p> <p>Large entities use the <b>ASC 350 (Intangible Assets)</b> standard, which requires the recognition of goodwill impairment. Small entities may use the <b>ASC 350 (Intangible Assets)</b> standard, which allows for more flexibility in goodwill impairment testing.</p>	<p>5. <b>Goodwill Impairment</b></p> <p>Small entities may use the <b>ASC 350 (Intangible Assets)</b> standard, which allows for more flexibility in goodwill impairment testing.</p>

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	750.00
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

<b>SUBTOTAL (1)</b>	<b>(\$)</b>	<b>750.00</b>
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			Extra Claims		Fee from below		Fee Paid
Total Claims	72	-20** =	52	x	18.00	=	936.00
Independent Claims	7	-3** =	4	x	84.00	=	336.00
Multiple Dependent						=	

	Large Entity	Small Entity
1. <b>Revenue Recognition</b>	Revenue is recognized when the performance obligation is satisfied, which is when control of the goods or services is transferred to the customer.	Revenue is recognized when the performance obligation is satisfied, which is when control of the goods or services is transferred to the customer.
2. <b>Expense Recognition</b>	Expenses are recognized when the related asset is consumed or the liability is incurred.	Expenses are recognized when the related asset is consumed or the liability is incurred.
3. <b>Asset Recognition</b>	Assets are recognized when the company has control over the resource and it is probable that the resource will generate future economic benefits.	Assets are recognized when the company has control over the resource and it is probable that the resource will generate future economic benefits.
4. <b>Liability Recognition</b>	Liabilities are recognized when the company has a present obligation to transfer economic resources in the future.	Liabilities are recognized when the company has a present obligation to transfer economic resources in the future.
5. <b>Equity Recognition</b>	Equity is recognized as the residual interest in the assets of the entity after deducting all liabilities.	Equity is recognized as the residual interest in the assets of the entity after deducting all liabilities.

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

<b>SUBTOTAL (2)</b>	<b>(\$)</b>	<b>1,272.00</b>
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**\*\*or number previously paid, if greater; For Reissues, see above**

### 3. ADDITIONAL FEES

Large Entity	Small Entity
<p>1. <b>Revenue Recognition</b></p> <p>Large entities use the <b>percentage of completion method</b> for long-term contracts, recognizing revenue as work progresses. Small entities often use the <b>cost of sales method</b>, recognizing revenue only when the contract is completed.</p>	<p>1. <b>Revenue Recognition</b></p> <p>Small entities typically use the <b>cost of sales method</b> for long-term contracts, recognizing revenue only when the contract is completed.</p>
<p>2. <b>Inventory Valuation</b></p> <p>Large entities use the <b>FIFO (First In, First Out)</b> method for inventory valuation. Small entities may use the <b>LIFO (Last In, First Out)</b> method, which can provide a tax advantage in periods of rising prices.</p>	<p>2. <b>Inventory Valuation</b></p> <p>Small entities may use the <b>LIFO (Last In, First Out)</b> method for inventory valuation, which can provide a tax advantage in periods of rising prices.</p>
<p>3. <b>Depreciation</b></p> <p>Large entities use the <b>MACRS (Modified Accelerated Cost Recovery System)</b> for depreciation. Small entities may use the <b>straight-line method</b> for depreciation.</p>	<p>3. <b>Depreciation</b></p> <p>Small entities may use the <b>straight-line method</b> for depreciation.</p>
<p>4. <b>Lease Accounting</b></p> <p>Large entities use the <b>ASC 842 (Leases)</b> for lease accounting. Small entities may use the <b>ASC 840 (Leases)</b> for lease accounting.</p>	<p>4. <b>Lease Accounting</b></p> <p>Small entities may use the <b>ASC 840 (Leases)</b> for lease accounting.</p>
<p>5. <b>Goodwill Impairment</b></p> <p>Large entities use the <b>ASC 350 (Intangible Assets)</b> for goodwill impairment testing. Small entities may use the <b>ASC 350 (Intangible Assets)</b> for goodwill impairment testing.</p>	<p>5. <b>Goodwill Impairment</b></p> <p>Small entities may use the <b>ASC 350 (Intangible Assets)</b> for goodwill impairment testing.</p>

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge – late filing fee or oath	
1052	50	2052	25	Surcharge – late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive – unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

<b>SUBTOTAL (3)</b>	<b>(\$)</b>	<b>0.00</b>
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Complete (if applicable)

Name (Print/Type) Laurie L Hill

**Registration No.**  
**(Attorney/Agent)**

51,804

**Telephone** (858) 720-7955

**Signature**

**Date** September 19, 2003